

2014 - 2017



Navajo Nation Department of Information Technology

2014 – 2017 Strategic Plan

Table of Contents

Table of Contents.....	2
Executive Summary.....	4
Who We Are and What We Do.....	5
Vision.....	7
Key Priority Areas.....	7
SWOT Analysis.....	8
Key Priority Areas and Strategic Outlook.....	10
Key Assumptions.....	11
Key Priority Area 1: TRAINING	11
Key Priority Area 2: GOVERNANCE.....	12
Key Priority Area 3: CUSTOMER SERVICE.....	12
Key Priority Area 4: COST SAVINGS & EFFICIENCY.....	13
Key Priority Area 5: INFRASTRUCTURE	15
Key Priority Area 6: BUSINESS CONTINUITY & DISASTER RECOVERY	16
Strategic Goals.....	17
Key Objectives.....	17
Purpose and Outcomes	17
Actions and Processes.....	17
Outcome Measures	17
External Factors.....	17
Strategic Goals.....	18
Strategic Goals, Key Objectives and Outcome Measures	18
<i>STRATEGIC GOAL 1</i>	18
Key Objective 1.1.....	18
Key Objective 1.2.....	19
<i>STRATEGIC GOAL 2</i>	20
Key Objective 2.1.....	20
Key Objective 2.2.....	20

Key Objective 2.3.....	21
Key Objective 2.4.....	21
<i>STRATEGIC GOAL 3</i>	22
Key Objective 3.1.....	22
Key Objective 3.2.....	23
Objective 3.3	23
Key Objective 3.4.....	24
<i>STRATEGIC GOAL 4</i>	24
Key Objective 4.1.....	24
<i>STRATEGIC GOAL 5</i>	25
Key Objective 5.1.....	25
Key Objective 5.2.....	25
Objective 5.3	26
<i>STRATEGIC GOAL 6</i>	27
Key Objective 6.1.....	27
Key Objective 6.2.....	27
Key Objective 6.3.....	28
Key Objective 6.4.....	28
Monitoring and Evaluation	29

Executive Summary

The Navajo Nation Department of Information Technology (DIT) Strategic Plan is a development plan containing the Vision and Mission; Key Priority Areas; Strategic Goals and Key Objectives; and an Action Plan. It is DIT's roadmap through which the organization plans to focus on organizational improvement and accomplish the priorities and goals in the upcoming six year period.

In October 2009, a DIT Performance Assessment Audit was completed to evaluate:

1. the impact DIT is making to minimize IT expenses;
2. DIT staff competencies in accordance with the IT needs of the Navajo Nation;
3. whether staff work is in accordance with the Department Plan of Operation, IT Governance Plan, and IT Strategic Plan;
4. the work effort of DIT on mission critical systems;
5. whether a strategic plan has been implemented and managed;
6. if DIT's performance measures are aligned with the Navajo Nation user needs and delivery of services is satisfactory;
7. controls of the computer network, administration and management thereof.

The key results of the Performance Assessment Audit determined that a Strategic Plan had not been adopted or implemented; the Plan of Operation is not current; and the Navajo Nation had not adopted an IT Governance Plan.

In May 2010, DIT, in community with the Division of General Services, participated in a Strategic Planning Session. DIT managers developed a vision, mission and key priority areas that were consistent with the Division of General Services. This session was critical in aligning the strategic goals and initiatives of the department with those of the entire division. DIT Managers developed goals, priorities and action items based on the results of the Performance Assessment and in alignment with the vision and mission of DIT. The goals, priorities and action items focused on an 18-month period and included the development and adoption of an IT Governance Plan (*see Appendix B*); the revision of the Plan of Operation (*see Appendix C*); and the development and implementation of a six-year Strategic Plan. These three components provide the framework and the roadmap for the strategic priorities of DIT over the next six year period.

Over the past 18 months, the DIT management team began the process of reviewing our prior strategic goals initiatives, developing and implementing a plan that addresses the priorities outlined in the Performance Assessment; meet the needs of the Nation's users; and is feasible in our current operating

environment. The team's goal was to develop a plan that builds on DIT's accomplishments and strengths while identifying and clarifying opportunities to strengthen the effectiveness of the organization.

The key elements of DIT's Strategic Plan are: Key Priority Areas, Strategic Goals, Key Objectives, Outcome Measures and External Factors that are presented in the core part of this document.

This plan is not an end in itself but rather reflects an ongoing process and a tool to help DIT accomplish its vision and mission. As in the previous strategic effort, it is a changing and dynamic plan, which will be continuously revised and updated via the Action Plan.

Who We Are and What We Do

The Department of Information Technology (DIT) was established, within the Division of General Services, Executive Branch. The General Services Committee (GSC) of the Navajo Nation Council provides legislative oversight for the Department of Information Technology. DIT works with the three governmental branches, divisions, departments, agencies and other entities that encompass the Navajo Nation as a whole.

The Navajo Nation central government offices as well as the Department of Information Technology (DIT) are housed in Window Rock, Arizona. The Navajo Nation intersects with three states: New Mexico, Arizona and Colorado. The users of technology within the boundaries of the Navajo Nation and the Navajo Chapters of Tohajiilee, Ramah and Alamo are under the broader IT planning. The local government Chapter Houses allow for government activities to be carried out locally. A major percentage of government transactional activities are done in paper form. The Navajo Nation citizens, in large scale, live in remote areas on the reservation in a geographical area of 27,000 square miles.

An IT Plan of Operation (POO) was adopted in 1999 and has been revised in 2010, per the Performance Assessment (*see Appendix C*). The POO outlines the purpose of the Department of Information Technology (DIT) which shall be to:

1. Carry out the directives of the Navajo Nation Council Resolution CJY-34-92, as amended; which specifically mandates the creation of an "Open Information Environment" among the governmental entities of the Navajo Nation, and to oversee the use information technology to achieve an open information-sharing environment.

2. Assume sole authority for data guardianship and enterprise-level Information Technology (IT) management.
3. Ensure IT compliance and secured information sharing in order to support an "Open Information Environment" as set forth by the Navajo Nation Council Resolution.
4. Implement and maintain an overall Information Technology (IT) strategy which provides quality and timely IT related services to the Judicial, Legislative, and Executive Branches of the Government; including, all programs, departments, divisions, agencies, chapterhouses, libraries, and educational institutions regardless of funding mechanisms.
5. Ensure the overall management, coordination and maintenance of all IT and IT functions within the NN Government.
6. Own and maintain all IT personnel, budgets, projects, and activities under a single IT authority for the entire NN.
7. Promote the Department of IT as the single IT authority for the Navajo Nation.
8. Develop and maintain IT standards and policies to ensure holistic coordination in the effective and efficient use of all information technology resources.
9. Build IT alliance and gain optimum IT performance and efficiencies within the NN Government.
10. Gain significant IT cost savings through consolidation and economies of scale.
11. Achieve distributed automated processing of selected financial transactions to the Agency and Chapter levels of the Navajo Nation government.
12. Enable secure online Agency and Chapter access to various Navajo Nation governmental data and information.
13. Facilitate and centralize Agency and Chapter access to the Internet.
14. Implement continuous improvements in the areas of IT capacity, infrastructure, and performance within the Navajo Nation.

Items for consideration in accomplishing the mission and vision for DIT which, are constraint visible, include: the distance between each of the communities; the cost associated with IT infrastructure; the need for cooperative alliances with other Navajo Nation IT entities, other agencies, the states, and the private sector to achieve connecting these communities.

Mission Statement

To provide efficient, reliable, cost effective services through state of the art technology for the Navajo Nation.

Vision

Knowledgeable and Innovative IT Solutions

Key Priority Areas

- ◆ Training
- ◆ Customer Service
- ◆ Governance
- ◆ Business Continuity/Disaster Recovery
- ◆ Cost Savings and Efficiency
- ◆ Infrastructure

SWOT Analysis

The Department of Information Technology (DIT) operates in a dynamic environment that includes political, social, technological, and environmental factors that affect our goals, key objectives, and operations. During our strategic planning sessions, the DIT Management Team reviewed and discussed our Strengths, Weaknesses, Opportunities and Threats (SWOT) in relation to the Performance Assessment evaluation. A thorough SWOT analysis allows us to fully assess the current state of operations affecting future strategic planning.

Strengths

There is commitment and dedication amongst the IT Staff. All members of the IT Staff are Navajo and are familiar with the government operations of the Navajo Nations and the Navajo culture. There is a strong dedication to ensuring the success of DIT and a commitment to serving the Navajo government and its people.

DIT Staff have worked together for many years and are a very cohesive team that draws upon one another's strengths and support each other's weaknesses.

The infrastructure of DIT includes single directory for email services to be offered to all government entities and personnel of the Navajo Nation.

DIT also has a good part of the hardware infrastructure necessary, as well as the virtualization technology in place, to offer "Cloud Services" in some form, to the Navajo Nation.

Weaknesses

There is an insufficient amount of financial resources to accomplish the recommendations outlined in the Performance Assessment. Many departments, programs, and agencies within the Navajo Nation government have begun to build their own IT staff and services. This results in diverting of tasks, duplication of IT efforts and increased IT costs for the Navajo Nation.

A shortage of staff has not allowed for the timely service of clients outside of Window Rock and beyond normal operating hours resulting in a loss of confidence for DIT customers. There is difficulty recruiting and retaining qualified IT professionals at the current wage scale and due to the lengthy and cumbersome hiring process of the Navajo Nation.

The absence of an approved IT Governance Plan that establishes a framework to allow for all divisions, agencies, programs, chapters and entities to work collaboratively towards a single IT function and provide information sharing.

Currently there are significant policy gaps in data ownership and data sharing; and shortfalls in security access regulations.

Opportunities

The Navajo Nation Telecommunications & Utilities Department (NNTU) is currently working on a project to implement Voice over IP for the Navajo Nation. DIT has an opportunity to partner with this department to access their completed customer listing and Infrastructure Topology documentation. This documentation could be used to complete the hardware and software enterprise licensing audit items. DIT may also have an opportunity to share the fiber infrastructure to connect IT to the Navajo Nation. This fiber infrastructure could potentially enable remote client access to resolve incidents more efficiently because IT technicians will not have to travel to the physical locations in many cases.

DIT has the opportunity to educate all entities on the cost and efficiency benefits of "one IT" as a grass roots effort to all departments within the Navajo Nation.

DIT has an opportunity to investigate the feasibility, possible efficiencies and costs savings of an internal cloud, external cloud, or both in some combination. Clouds are fast becoming an industry norm. An external cloud could possibly save DIT capital investment and staffing. DIT also has a good part of the hardware infrastructure necessary, as well as the virtualization technology in place, to offer "Cloud Services" in some form to the nation.

Current technologies offer offsite backup capabilities as part of an ISP or independently. DIT has storage infrastructure that would allow them to explore offering such a service.

DIT has the capability of expanding their Web Help Desk to include self-logging external tickets. This would allow the public to create an account in order to log their own incident ticket, increasing DIT's overall "presence" in the Navajo Nation, and possibly reduce the need for additional DIT Technicians.

Many service providers offer Microsoft Exchange and SharePoint services as part of their service. DIT is currently implementing those technologies in-house, and this may be an opportunity to consolidate IT service support.

DIT has the opportunity to look into the advantages of enterprise software deployments to optimize resources. This resource optimization can occur through digital software delivery, which will help streamline the distribution process to reduce costs and improve readiness. Enterprise software vendors are also beginning to provide expanded training, software asset management, license optimization, customer and partner portals.

Threats

Lack of standardized enterprise wide software could inhibit rapid disaster recovery and business continuity efforts, as well as efficient help desk support.

DIT has limited IP capacity in their existing IP V4 scheme and will be unable to grow their network without the reconfiguration of their IP addressing scheme. In addition, they will eventually have a compatibility problem when the standard transitions from V4 to V6.

DIT has limited IT storage capacity and could run out of space if they expand their customer base and increase their IT offerings.

DIT has single points of failure within their IT systems and infrastructure. Some of these points of failure include, the point of presence (POP), network hardware redundancy, network security, and manual back-up tape swaps. These single points of failure are possible threats to guaranteed up time and should be identified, documented and addressed.

The Navajo Nation covers a geographical area of 27,000 square miles and the distance between the various chapters and agencies of the Navajo Nation are vast and limiting with regards to providing services.

Key Priority Areas and Strategic Outlook

A key outcome of the SWOT analysis was the development of the six Key Priority Areas (KPAs). This section of the plan is intended to present the strategic outlook for DIT in the key priority areas:

1. Training
2. Governance
3. Customer Service
4. Cost Savings and Efficiency
5. Infrastructure
6. Business Continuity/Disaster Recovery

The following information presents the strategic outlook in each of the Key Priority Areas taking into account the Performance Assessment, SWOT Analysis, and Mission and Vision of DIT.

Key Assumptions

As the basis for the development of this strategic plan, the Department of Information Technology (DIT) has identified the following key assumptions that, if significantly changed, could affect our ability to implement this plan:

- *DIT has support of the Executive Branch of the Nation in working towards a collaborative IT function for the entire Navajo Nation*
- *IT Governance and a revised Plan of Operation (POO) will be adopted into legislation*
- *Additional Funding will be secured to accomplish the Key Objectives*

Based on these planning assumptions, DIT has developed the Strategic Plan for **FY 2014 - 2017**. The following is a summary of the outlook, issues and opportunities within each of the six Key Priority Areas.

Key Priority Area 1: TRAINING

The Department of Information Technology (DIT) will ensure that the staff has the appropriate skills and training to accomplish the technology mission of the Navajo Nation. DIT will keep pace with evolving technologies, develop and acquire the skill sets required to improve the technological and operational capacity of the staff.

The current state of IT around the Navajo Nation is not consistent and there are a variety of platforms and technologies to support. As DIT works toward a more collaborative and consistent IT effort, the staff will continue to be trained on various systems, software, and hardware.

DIT has contracted with SkillSetOnline to provide training in a variety of systems, platforms, technologies and IT certifications. Additionally, a Staff Training Plan will be developed to document the training and skills needed for each position within the organization. As new technologies emerge and the business needs of all Navajo Nation agencies, branches, departments, and chapters evolve, DIT will source training opportunities to meet the needs of our clients.

DIT will ensure that all IT Projects are effectively managed and implemented. We will continue to work with a certified IT Project Manager that has the

expertise and experience to assist in the success of our projects as well as additional consultants that will be able to fill in the gaps of experience and provide staff mentoring until the comprehensive staff training plan has been fully executed.

Key Priority Area 2: GOVERNANCE

The Department of Information Technology (DIT) has developed an IT Governance Plan (*see Appendix B*) that defines the process by which decisions are made around IT investments. This plan delegates the spectrum of IT-related duties to specific individuals and governance bodies thus creating a comprehensive enterprise IT governance framework.

The IT Governance Plan defines the IT Steering Committee which is the centralized approval body representing all Navajo Nation departments in making IT-related investment decisions. The IT Steering Committee was a specific recommendation identified in the Performance Assessment. DIT will continue to work with council to gain approval of the IT Governance Plan and toward the establishments of an IT Steering Committee.

DIT will pursue an organizational restructure, relocating the department from the Division of General Services and into the Office of Information Technology. The Office of Information Technology will be headed by a Chief Information Officer (CIO) and report directly to the Navajo Nation President's Office. The elevation of status to the Office of IT will send a clear message to the rest of the Navajo Nation and the importance of a cohesive and collaborative IT function. It will ultimately give DIT greater IT visibility and authority Nationwide. The CIO will have a strong IT background and be a key contributor, along with the Vice President and Division Directors, to the development and implementation of strategic goals for the Navajo Nation.

Key Priority Area 3: CUSTOMER SERVICE

The Department of Information Technology (DIT) will foster relationships with our customers that include:

1. communicating DIT's new and existing services;
2. explaining, educating and informing all entities the value of our services, and;
3. describing the capabilities, plans, and changes that are under consideration.

DIT will partner with all governmental branches, programs, departments, divisions, agencies, chapterhouses, libraries, and educational institutions of the Navajo Nation to understand their current and future business drivers; to expand current solutions and remove ineffective solutions; and to develop long- term solutions in support of their missions.

Based on the results of the Performance Assessment, DIT has implemented a Help Desk system, Web HelpDesk, to serve as a measure of performance tracking for both DIT and the Navajo Nation. Web HelpDesk serves as an incident tracking tool from the first customer contract through resolution and feedback. It allows DIT to continually monitor and assess the user's support needs and has improved the capabilities image of DIT. DIT will work on educating and informing all governmental branches, programs, departments, divisions, agencies, chapterhouses, libraries, and educational institutions of the Navajo Nation to the benefits of this service.

The Telecommunications & Utilities Department of the Navajo Nation (NNTU) is in the process of installing a fiber infrastructure to be used for VoIP. With the completion of this fiber, DIT may have the ability to respond remotely to customers on network, server, software, and other technical support issues. This will significantly improve customer service by expediting the incident resolution process.

As DIT continues to focus on customer service as a business priority and provide support services in an efficient and timely manner, the need for additional IT staffing will be monitored and evaluated. The need for additional networking, technician, and other support staff will increase at a much slower rate due to the efficiencies in customer service directly related to the implementation of new technology infrastructure and systems.

Key Priority Area 4: COST SAVINGS & EFFICIENCY

The Department of Information Technology (DIT) continues to encourage fiscal resourcefulness and commits to improving efficiencies and reducing technology cost in collaboration with all governmental branches, programs, departments, divisions, agencies, chapterhouses, libraries, and educational institutions of the Navajo Nation.

This will be accomplished by focusing on the following areas:

Resource Optimization – Optimize the Navajo Nation's IT strategic assets. Each of the Navajo Nation government entities has some level of IT hosting or service provisioning capability. This creates an opportunity to significantly reduce cost, improve service quality and availability through a nationwide view

of IT optimization. The goal is to centralize and increase asset utilization thus lowering cost. In the current environment, many of the Navajo Nation government entities have built or begun to build their own internal IT staff and seek IT services that are already invested in and provided by DIT, resulting in a diverting of IT resources and a lack of a centralized resource management. Additionally, many of the smaller programs, departments, and other entities of the Navajo Nation are currently working with IT vendors at a near “retail level” cost point.

DIT will focus on an enterprise-wide consolidation of anti-virus solutions as well as software and hardware licensing. Currently there is several different email software and hardware systems deployed across all government entities of the Navajo Nation and DIT currently has the capability of hosting the entire Navajo Nation’s email services. This service will be highlighted to all Navajo Nation entities in an effort to reduce cost, as well as mitigate risks associated with business continuity.

DIT may have the unique opportunity to optimize their staffing resources with the completion a new fiber infrastructure. Technical issues will be able to be resolved remotely and the need for additional technical staffing will be significantly reduced.

Finally, DIT will work to migrate Navajo Nation Governmental IT systems to a common data center in order to reduce the IT footprint, thereby reducing cost and improve manageability of the IT infrastructure for the Navajo Nation.

Emerging Technologies – DIT will keep abreast of emerging technology, such as Cloud Technologies, in order to streamline and provide for optimal efficiencies. Software services and infrastructure services business models will be evaluated to support the consolidation initiatives. Low upfront cost and relatively lower infrastructure maintenance challenges are the compelling drivers for this effort. DIT will invest in technologies that are consistent with the Navajo Nation’s strategic direction, IT Plan of Operation and IT architecture.

Process, Procedure and Standards Review and Analysis – DIT has defined procedures within the IT Governance Plan that outlines the procurement and management of IT investments as well as promulgates guidelines for oversight of IT procurements. All government agencies’ IT procurement activities will be supported through the review and approval of all IT request for proposals, contract vendor requests, contracts and amendments.

DIT will conduct ongoing reviews with IT service vendors to reduce the cost of IT provisioning on behalf of all government entities using enterprise services. We will implement asset management procedures and tools to enable fiscal and

physical management of IT assets inclusive of equipment replacement funds and configuration management.

Key Priority Area 5: INFRASTRUCTURE

The Department of Information Technology (DIT) will focus on the development of a continuous, dependable, and cohesive end-to-end infrastructure to connect the Navajo Nation. This will enable IT services to be centralized and bring IT support to the Navajo Nation. In addition, this infrastructure will enable business continuity for daily IT activity.

DIT offices will be renovated in order to centralize and house all IT employees. All IT personnel located in a single facility, communication, coverage, coordination and ultimately IT customer service will improve significantly.

Separate and redundant DSL lines to Navajo Nation governmental offices will be discontinued and the offices will be re-connected as part of the central IT infrastructure using DIT's Data Line/ISP. Centralized connectivity through DIT will improve IT management services and reduce overall Navajo Nation governmental cost.

DIT will migrate to Private Class A IP topology, or a long term IP address scheme allowing for significant growth. Available IP addresses will be needed for significant growth in customers and devices.

DIT will migrate the active directory domains into a single forest AD domain, or other domain strategy, to improve and centralize management efficiencies of domains and user profiles.

Single points of failure will be documented, identified, and addressed within the IT infrastructure. Some of these points of failure include, the Point of Presence (POP), network hardware redundancy, network security, and manual back-up tape swaps. These single points of failure are threats to the guaranteed up-time for customers.

DIT will partner with the Navajo Nation Telecommunications & Utilities (NNTU) department to access their completed customer listing, infrastructure topology documentation and possibly share the fiber infrastructure to connect IT to the Navajo Nation. This fiber infrastructure could potentially enable remote client access to resolve incidents more efficiently, because IT technicians may not have to travel to the physical locations in many cases.

All Navajo Nation Governmental branches, programs, departments, divisions, agencies, chapterhouses, libraries, and educational institutions will be educated and informed of the benefits of "One IT" as an effort to promote shared infrastructure capabilities and efficiencies.

The feasibility of an internal cloud, external cloud, or both, in some combination, will be investigated and evaluated. Clouds are fast becoming an industry norm. An external cloud could possibly save DIT capital investment and staffing. DIT also has a good part of the hardware infrastructure necessary, as well as the virtualization technology in place, to offer "Cloud Services" in some form to the Nation.

Key Priority Area 6: BUSINESS CONTINUITY & DISASTER RECOVERY

The Department of Information Technology (DIT) will implement capabilities for preparedness and emergency response that strengthen our ability and resiliency to support emergencies, disaster recovery, and nonstop performance (i.e. business continuity) of IT and communications across the Navajo Nation. Some of the deficiencies and opportunities identified in the Performance Assessment included the lack of a SAN storage system; a backup plan and offsite storage of tapes as well as a geographically separate "warm site". DIT has installed a SAN Storage System which provides disaster recovery restoration and daily data back-up capability. A Server Backup Plan has been developed and implemented which identifies a secure offsite storage location.

The ability to support expected levels of system restoration and business continuity of operations in the event of a disaster is a critical factor of quality infrastructure services delivery. The Navajo Nation, with DIT leading the effort, must continue to move towards common infrastructure services. It can do so by continuing to leverage the current IT architecture and identify opportunities to standardize, consolidate, and ultimately optimize the infrastructure.

The Performance Assessment recommends the addition of a Chief Information Security Officer (CISO) to be hired by the Navajo Nation reporting to the Legislative Branch. The main responsibility of the CISO will be to define, establish and implement a business continuity and disaster recovery program for the Navajo Nation. DIT will work with the legislative branch of the Navajo Nation in establishing the roles and responsibilities of this position.

Strategic Goals

The following section of the Strategic Plan presents the Department of Information Technology's (DIT's) six strategic goals based on each of the Key Priority Areas. These goals are crosscutting in nature and are intended to reflect the combined effort of all organizational elements to deliver important outcomes to the Nation at large.

Key Objectives

Each strategic goal has a number of key objectives that defines what DIT will do to work toward accomplishing the goal. The objectives are closely linked and identified as priorities for the organization. These 18 Key Objectives are consistent with the deficiencies identified in the Performance Assessment and are in alignment with the Mission, Vision, and Key Priorities of the Department of Information Technology (DIT).

Purpose and Outcomes

Each key objective has an identified purpose and outcome. This highlights what DIT plans to do and why it is important for accomplishing this objective. Each purpose and outcome presents the intended result of DIT's efforts and addresses how the Navajo Nation overall will benefit.

Actions and Processes

This portion of the objective describes how the outcome(s) will be achieved. It identifies and highlights key initiatives and activities that are planned to achieve results and enhance service delivery. A detailed Action Plan has been developed to provide a detailed summary of the actions and applicable human, capital, information, and other resources, as well as systems, processes, and technologies that are critical to achieve the intended program results. *See Appendix A: Action Plan.*

Outcome Measures

Specific, measurable outcomes have been identified for all key objectives. Each outcome measure has a clearly defined performance target that identifies anticipated levels of performance to be achieved and addresses the "tangible" results and value to DIT and the Navajo Nation. As these performance targets are strategic in nature, it is anticipated that they may be modified in future years based on the results of comprehensive program evaluations. The Outcome Measures for each defined strategic objective will be tracked and monitored using the Action Plan.

External Factors

This portion identifies factors and issues that may be beyond its control and could significantly impact DIT's ability to achieve its goals and objectives.

Strategic Goals

STRATEGIC GOAL 1

Improve the technological and operational capacity of IT staff and services.

STRATEGIC GOAL 2

To provide reliable, timely and efficient IT services.

STRATEGIC GOAL 3

Expand the roll of IT to a centralized, enterprise wide operation.

STRATEGIC GOAL 4

Reduce Information technology risks.

STRATEGIC GOAL 5

Reduce IT Costs and streamline technologies for optimal efficiency.

STRATEGIC GOAL 6

Improve centralized IT connectivity and information management services.

Strategic Goals, Key Objectives and Outcome Measures

STRATEGIC GOAL 1

Improve the technological and operational capacity of IT staff and services.

Key Objective 1.1 Hire a consultant to evaluate IT needs and develop and plan for implementation.

Purpose and Outcomes - An outside IT Consultant has the expertise and objectivity to evaluate the needs of the Navajo Nation and ability to effectively develop an implementation and project plan for accomplishing the IT goals and objectives of the Navajo Nation. The outcome is a solid plan of execution of the goals and objectives outlined in the Performance Assessment recommendations as well as the Strategic Plan.

Actions and Processes –DIT has hired Valliant Consulting Group and developed an IT Governance Plan, revised the outdated Plan of Operation, and created the Corrective Action Plan addressing the recommendations outlined in the Performance Assessment.

Outcome Measures

- ✓ Consultant contract in place
- ✓ Development of a Governance Plan
- ✓ Development of a Strategic Plan
- ✓ Revision of the Plan of Operation
- ✓ Corrective Action Plan addressing the Performance Assessment

External Factors – The Navajo Nation government may not approve the IT Governance Plan which could inhibit progress in some of the areas identified in the Performance Assessment. Funding may not be available in the future for an IT Consultant.

Key Objective 1.2 Hire a Project Manager(s) to assist in the success of an implementation plan.

Purpose and Outcomes – An experienced IT Project Manager has the skills and ability to implement large and complex Information Technology projects and has the tools available to assist in the success of DIT's projects. The outcome will be the implementation of all the Key Objectives of the Strategic Plan.

Actions and Processes – DIT will work with the contracted IT Project Manager in the planning, collaboration of resources, and the execution of the Strategic Action Plan to successfully implement projects.

Outcome Measures

- ✓ An updated Strategic Action Plan
- ✓ Completion of projects according to establish project schedules.

External Factors – Funding availability to support an IT Project Manager.

STRATEGIC GOAL 2

To provide reliable, timely and efficient IT services.

Key Objective 2.1 Implement a Help Desk system

Purpose and Outcomes – DIT will implement a Help Desk system that will serve as an incident tracking tool and allow DIT to continually monitor, resolve and assess user support needs.

Actions and Processes – DIT has worked with the IT Project Manager in implementing Web HelpDesk, an off-the-shelf help desk system, and revised Help Desk Operating Procedures based on the new system. DIT will continue to educate and inform all Navajo Nation Government entities on the benefits of the system to assist them in resolving their technical issues.

Outcome Measures

- ✓ Implemented Help Desk System
- ✓ Revised Help Desk Operating Procedures
- ✓ Increased Number of Trouble Tickets as customers increase
- ✓ Centralized incident tracking with reporting of top incident causes for strategic improvement areas
- ✓ Reduction in Mean Time to Resolve/Repair (MTTR)

External Factors – No external factors affecting this goal are identified.

Key Objective 2.2 Hire additional Network Staff

Purpose and Outcomes – This objective was identified in the Performance Assessment with the purpose to increase customer service levels by providing additional staff to maintain the Active Directory, email services, internet access, server and communication systems. The outcome would be increased levels of customer service and providing coverage 24/7; keeping systems updated and online.

Actions and Processes – As DIT implements IT infrastructure, centralization, and enterprise licensing, thus providing more efficient and timely customer service, the need for additional Network Staff will be monitored and evaluated. The process used to determine when additional Network Staff are required will be to compare the increased customer base in conjunction with the efficiencies obtained through these IT implementations, and the current number of network staff.

Outcome Measures

- ✓ Increased customer base
- ✓ 24/7 network support
- ✓ Increased network availability and uptime (Decreased network downtime)
- ✓ Decreased number and severity of network incidents
- ✓ Up to date network infrastructure
- ✓ Decreased Mean Time to Resolve/Repair (MTTR)

External Factors – Funding for additional staff is a major factor to the accomplishment of this goal. Additionally, the current established pay rate for network positions is not at market levels required to hire the expertise needed for the position.

Key Objective 2.3 Hire additional PC Technicians

Purpose and Outcomes – This objective was identified in the Performance Assessment with the purpose to increase customer service levels by providing additional staff to provide customer service and technical support at each of the five Agency offices located throughout the Navajo Nation. The outcome would be increased levels of customer service in remote areas of the Nation as well as providing additional Help Desk support services.

Actions and Processes – As DIT implements IT infrastructure, centralization, and enterprise licensing, providing more efficient and timely customer service, the need for additional IT PC Technicians will be monitored and evaluated. The process used to determine when additional PC Technicians are required will be to compare the increased customer base in conjunction with the efficiencies obtained through these IT implementations, and the current number of PC Technicians.

Outcome Measures

- ✓ Increased customer base
- ✓ Increase in customer support at each of the five Agency Offices
- ✓ Increased number of incident tickets through the Help Desk
- ✓ Increased system uptime for customers (Decreased downtime)
- ✓ Decreased mean time to repair (MTTR)

External Factors – Funding for additional staff is a major factor to the accomplishment of this goal. Additionally, the current established pay rate for technical positions is not at market levels required to hire the expertise needed for the position. The implementation of a fiber infrastructure may positively impact the ability to service these areas remotely.

Key Objective 2.4 Increase the number of IT fleet vehicles

Purpose and Outcomes – This objective was identified in the Performance Assessment with the purpose to increase customer service levels by increasing the number of vehicles to accommodate several personnel responding to trouble calls simultaneously. The outcome would be increased number of vehicles and reduction in customer response time on calls that require an onsite visit.

Actions and Processes – As DIT implements IT infrastructure, centralization, and enterprise licensing, providing more efficient and timely customer service, the need for additional IT fleet vehicles will be monitored and evaluated. The process used to determine when additional fleet vehicles are required will be to compare the increased remote customer base in conjunction with the efficiencies obtained through these IT implementations, and the current number of fleet vehicles handling trouble calls.

Outcome Measures

- ✓ Increase in number of IT fleet vehicles
- ✓ Increased customer base
- ✓ Increased number of incident tickets through the Help Desk
- ✓ Increased system uptime for customers (Decreased downtime)
- ✓ Decreased mean time to repair (MTTR)

External Factors – Funding for additional vehicles is a major factor to the accomplishment of this goal. The implementation of a fiber infrastructure may positively impact the ability to service these areas remotely and significantly reduce the need for onsite visits.

STRATEGIC GOAL 3

Expand the roll of IT to a centralized, enterprise wide operation.

Key Objective 3.1 Update the Plan of Operation and set up a Steering Committee

Purpose and Outcomes – DIT will update the current Plan of Operation to incorporate any advances in technologies or operations and the changing IT needs of the Navajo Nation. Additionally, the Plan of Operations will refer to a newly adopted IT Governance plan which establishes the authority of an IT Steering Committee which reviews IT investments and the IT needs of the Navajo Nation. The outcome will be an updated Plan of Operation and an approved governance document to establish a formal methodology for all subsequent IT-related policy making and standard setting and authorizes and promotes the development and implementation of a NN technical architecture.

Actions and Processes – DIT will revise the current Plan of Operation as well as an IT Governance Plan that will be submitted to the Navajo Nation legislature. DIT will work at providing educating and informing all Navajo entities on the updated plans and collaborating with each entity on their IT needs.

Outcome Measures

- ✓ Approved Plan of Operation and IT Governance Plan
- ✓ IT Steering Committee in place and having regularly scheduled meetings to make strategic decisions
- ✓ IT Operation Review Committee, Technical Architecture and Standards Committee, Service Management Review Boards/Committees in place and having regularly scheduled meetings

External Factors – The Navajo Nation legislature may not approve an updated Plan of Operation and IT Governance Plan.

Key Objective 3.2 Develop a long term Strategic Plan

Purpose and Outcomes – DIT will develop an Information Technology Strategic Plan that supports the mission and vision of DIT in deploying state-of-the-art, cost-effective and efficient technologies in support of all Navajo Nation government operations. The outcome is the adoption of the Strategic Plan by the appropriate governing authorities.

Actions and Processes – Create, review, update, and revise a Strategic Plan.

Outcome Measures

- ✓ Updated Strategic Plan approved under signature authority by the General Services Committee

External Factors – The Strategic Plan may not be approved by the designated governing authority.

Objective 3.3 Hire a Chief Information Security Officer (CISO)

Purpose and Outcomes – A CISO will be accountable and have authority to make decisions and implement securities throughout the Navajo Nation and will have the oversight and visibility from an audit standpoint to provide the checks and balances needed to assess and mitigate security risks. The outcome will be more secure IT systems.

Actions and Processes – DIT will develop a position description for the CISO identifying the roles, responsibilities, skills, abilities and qualifications needed to hire an experienced CISO. The position description will be submitted to the Legislative branch for review and adoption into the Navajo Nation.

Outcome Measures

- ✓ Position description submission
- ✓ CISO position has been approved and hired

External Factors – The legislative branch may not follow through in getting this position approved and hired. Additionally, it may be difficult in recruiting the skills and expertise needed for the Navajo Nation.

Key Objective 3.4 Restructure DIT into an Office of Information Technology

Purpose and Outcomes – The Office of IT will have more visibility, influence and authority to manage a cohesive IT function across the Navajo Nation and will provide IT centralization and enterprise solutions optimizing resources across the Nation. The outcome will be an elevated Office of Information Technology in alignment with and equal to all other Navajo Nation divisions.

Actions and Processes – DIT will submit reorganization plans to the General Services Committee to elevate DIT into an Office of Information Technology reporting directly to the President.

Outcome Measures

- ✓ Creation and approval of the Office of Information Technology
- ✓ Chief information Officer (CIO) in position

External Factors – The appropriate governing bodies may not approve the organizational restructure.

STRATEGIC GOAL 4

Reduce information technology risks.

Key Objective 4.1 Implement a Disaster Recovery Plan

Purpose and Outcomes - A comprehensive Disaster Recovery Plan will be implemented by DIT to minimize disruptions to business operations and limit the extent of any damage; and provide for smooth and rapid restoration of services. The outcome will be a Disaster Recovery Plan.

Actions and Processes - DIT will draft policies and procedures for inclusion of a Disaster Recovery Plan to include a Server Backup Plan and securing of an offsite location for the storage of backup tapes. All financial systems and data will be fully secured in a datacenter. Criteria for a geographically separate “warm site” will be developed and implemented.

Outcome Measures

- ✓ Comprehensive Disaster Recovery Plan
- ✓ Offsite Storage Location secured and in use
- ✓ "Warm-Site" in position and functional

External Factors- Funding is a potential barrier to a geographically separate "warm-site".

STRATEGIC GOAL 5

Reduce IT Costs and streamline technologies for optimal efficiency.

Key Objective 5.1 Deploy an enterprise-wide anti-virus solution

Purpose and Outcomes –An enterprise wide anti-virus solution will provide consistent and standardized detection and removal of IT system threats. The outcome will be significant cost savings and increased resource efficiency to the Nation due to the implementation of a standardized, centrally managed solution.

Actions and Processes- DIT has an enterprise anti-virus solution in place and it is currently being evaluated for possible issues prior to beginning deployment to all government entities. Once the evaluation has been completed a deployment plan will be developed and deployment to the Nation will commence.

Outcome Measures

- ✓ Completed enterprise-wide anti-virus deployment plan
- ✓ An enterprise-wide anti-virus solution utilized by all government entities
- ✓ Reduced number IT system threats and viruses
- ✓ Reduced impact duration of threats and viruses
- ✓ Reduced anti-virus software cost

External Factors – Lack of approved IT Governance Plan and government entities making their own IT decisions regarding anti-virus solutions.

Key Objective 5.2 Implement enterprise-wide operating systems and productivity software

Purpose and Outcomes- Enterprise-wide operating systems and productivity software would greatly reduce IT costs in the areas of procurement, deployment, and administration and maintenance and also reduce technical support issues and costs. The outcome will be a more centralized IT function and significantly less costs to the Navajo Nation.

Actions and Processes – An inventory identifying all operating systems and productivity software, and a deployment plan will be developed. Once the deployment plan has been completed and approved, and funding is secured, deployment to the Nation will commence.

Outcome Measures

- ✓ Increased customer volume
- ✓ Reduced operating system and productivity software costs
- ✓ Reduced number of software and OS types
- ✓ Reduced IT support costs per seat/customer
- ✓ Reduced Mean Time to Resolve/Repair (MTTR)

External Factors – Lack of approved IT Governance Plan and government entities making their own IT decisions regarding OS and productivity software. Funding is a potential barrier to the purchase of OS and productivity software.

Objective 5.3 Contract with a single vendor for computing hardware

Purpose and Outcomes - A single vendor for computing hardware will allow the Navajo Nation government entities to take advantage of the economies of scale and volume discounts resulting in reduced IT costs for all government entities. The Navajo Nation as an enterprise would exercise a greater degree of influence as well as increase customer service and possibly price protection during a contract term.

Actions and Processes – Submit an RFP to secure a contractor; centralized for a few contractors with standard hardware. Provide education and marketing to various departments that would benefit from a single vendor for computing hardware.

Outcome Measures

- ✓ A contract with a single vendor
- ✓ Increased customer volume
- ✓ Reduced number of types of computing hardware
- ✓ Reduced Mean Time to Resolve/Repair (MTTR)
- ✓ Reduced computing hardware costs

External Factors – Lack of approved IT Governance Plan and government entities making their own IT decisions regarding computing hardware. Funding for the contract is a potential barrier.

STRATEGIC GOAL 6

Improve centralized IT connectivity and information management services.

Key Objective 6.1 Install a backup core router

Purpose and Outcomes – The purpose of installing the backup core router is to provide and improve continuous, centralized connectivity enabling business continuity for day to day activity. The outcome is improved up time for the Navajo Nation.

Actions and Processes – DIT will complete the configuration and installation of the backup core router to provide the necessary redundancy.

Outcome Measures

- ✓ Reduced number and duration of core outages
- ✓ Ability to provide concurrent maintainability

External Factors – There are no external factors due to the completion of this objective.

Key Objective 6.2 Discontinue DSL Lines

Purpose and Outcomes – The purpose of discontinuing the separate and redundant DSL lines utilized throughout all Navajo Nation governmental entities is to centralize internet connectivity through DIT improving management services and reducing overall cost to the Nation. The outcome will be centralized internet connectivity using DIT's Data Line and ISP.

Actions and Processes –Inventory all governmental entities to identify DSL lines. Develop a cut over plan to discontinue the DSL lines and re-connect as part of the central IT infrastructure using DIT's data line/ISP.

Outcome Measures

- ✓ Increased number of customers
- ✓ Elimination of separate NN DSL lines
- ✓ Improved through put time
- ✓ Reduced internet costs

External Factors – Centralized IT infrastructure must be put in place prior to the discontinuation of the DSL lines. Change of IT equipment to remote locations may be required. Lack of approved IT Governance Plan and government entities making their own IT decisions regarding internet

connectivity may be a potential issue. Funding for the disconnection of DSL is a potential barrier.

Key Objective 6.3 Migrate to a Class A IP scheme

Purpose and Outcomes – The purpose of migrating to a Private Class A IP Topology, or a long term IP addressing scheme is to allow for significant customer growth and ease of management. DIT will become IP address constrained as customers and devices are added, eventually running out of addresses and impacting network connectivity. The outcome will be long term network connectivity for a large and growing customer base.

Actions and Processes – Inventory customer base to capture location and function information. Develop an IP addressing plan, scheme/management plan, and transition plan.

Outcome Measures

- ✓ Increased network access capacity
- ✓ Increased capacity for secured VLANs
- ✓ Simplified IP management plan

External Factors – Centralized IT infrastructure must be in place for DIT network connectivity driving the need for additional IP addresses. Lack of approved IT Governance Plan and government entities making their own networking decisions may be a potential issue.

Key Objective 6.4 Merge and migrate into a single forest Active Directory

Purpose and Outcomes - The purpose of migrate multiple active directories into a single forest configuration is to streamline the administration for more efficient management in preparation for the large and growing customer base. The outcomes will be more efficient management of MS Exchange (email system) and simplified security policy management.

Actions and Processes – Gather the current active directory configuration state. Develop a single forest active directory migration plan and transition plan. Migrate Active Directory Domains into a Single Forest Active Directory Domain.

Outcome Measures

- ✓ Single Forest Active Directory Domain
- ✓ Simplified security policy management
- ✓ Streamlined MS Exchange administration

External Factors – Lack of approved IT Governance Plan and government entities making their own networking decisions may be a potential issue.

Monitoring and Evaluation

Evaluating the direction established in the Strategic Plan will be accomplished through the detailed Action Plan (Appendix A). The Department of Information Technology (DIT) Leadership will align its organizational resources to make continual progress of the goals established in the 2014-2017 Strategic Plan. The General Services Committee should evaluate the status of the plan during each regularly meeting with DIT to receive status updates from the management team on a quarterly basis. The Strategic Plan is designed to be an organizational road map to achieving the mission and vision of DIT. Adjustments may become necessary due to changes in the organization's external environment, availability of resources or a change in strategic goals and will continue to be documented in the Action Plan.